

2015 NIST Time and Frequency Seminar

Tuesday, June 2

Time	Speaker and Title
8:00-8:45	Registration and check-in
8:45-9:00	Announcements and introductions
9:00-9:40	<i>Tom O'Brian</i> : Assessment of Time, Timekeeping and Time Distribution
9:40-10:10	<i>John Vig</i> : Quartz Crystal Resonators and Oscillators
10:10-10:30	Break
11:00-12:00	<i>David Allan</i> : Introduction to Time Domain Measurement Standards
12:00-1:30	Lunch
1:30-3:00	<i>David Allan</i> : Time-Domain and Frequency-Domain Representations with Some Applications
3:00-3:20	Break
3:20-4:20	<i>Judah Levine</i> : Time Domain Analysis, Part II <i>David Howe</i> : Summary of Definitions: Freuqncy, Time, Noise, Stability, Accuracy,
4:20-5:00	Calibration, Traceability, Certification

Wednesday, June 3

Time	Speaker and Title
8:30-8:45	Announcements
8:45-10:15	<i>Craig Nelson</i> : Techniques of State-of-the-Art PM and AM Noise Measurements
10:15-10:35	Break
10:35-11:15	<i>Sam Stein</i> : Digital Measurements of PM-Noise of Precision Oscillators <i>Archita Hati</i> : Vibration-Induced Phase Noise: Oscillators and Non-Oscillatory
11:15-12:00	Components
12:00-1:15	Lunch
1:15-2:00	<i>Andrew Novick</i> : Basic Measurements of Time and Frequency
2:00-2:50	<i>David Howe</i> : Time Domain Analysis
2:50-3:10	Break
3:10-4:00	<i>Archita Hati</i> : Phase Noise Measurement Demonstration
4:00-5:00	Hands-on Tests and Noise Measurements
6:00	Dinner at Hotel Boulderado

Thursday, June 4

Time	Speaker and Title
8:00-8:15	Questions and Answers
8:15-9:00	<i>TBD</i> : Atomic Frequency Standards
9:40-10:30	<i>Svenja Knappe</i> : Chip-Scale Atomic Sensors and Clocks
10:30-10:40	Break
10:40-11:30	<i>Tara Fortier</i> : Optical Frequency Dividers Using Femtosecond Combs
11:30-12:00	<i>Frank Quinlan</i> : High-Speed Photodetection
12:00-1:00	Lunch
1:00-1:50	<i>Neil Ashby</i> : Geolocation using TDOA and FDOA with Precision Clocks and Oscillators
2:50-3:30	<i>Victor Zhang</i> : Time and Frequency Transfer Using Two-Way and GPS
3:30-3:40	Break
3:40-4:20	<i>Scott Papp</i> : Chip-Scale Optical Frequency Combs
4:20-5:00	<i>Elizabeth Donley</i> : Design and Performance of Commercial Atomic Clocks

Friday, June 5

Time	Speaker and Title
8:45-9:30	<i>Dave Leibrandt</i> : Trapped Ion Optical Clocks and Quantum Logic Spectroscopy
9:30-10:15	<i>Chris Oates</i> : Optical Lattice Clocks
10:15-10:30	Break
10:30-11:15	<i>Nate Newbury</i> : Optical Frequency Transfer over Fiber and Air
11:15-12:00	<i>Tom O'Brian</i> : Trends in Time Generation and Distribution
12:00-12:15	Conclusions and Discussion
2:00-4:00	Separate group tours of NIST: Time Scale, Josephson Junction Voltage Standard

Seminar Webpage: <http://tf.boulder.nist.gov/seminars/TFSeminar2015/Seminar.html>

